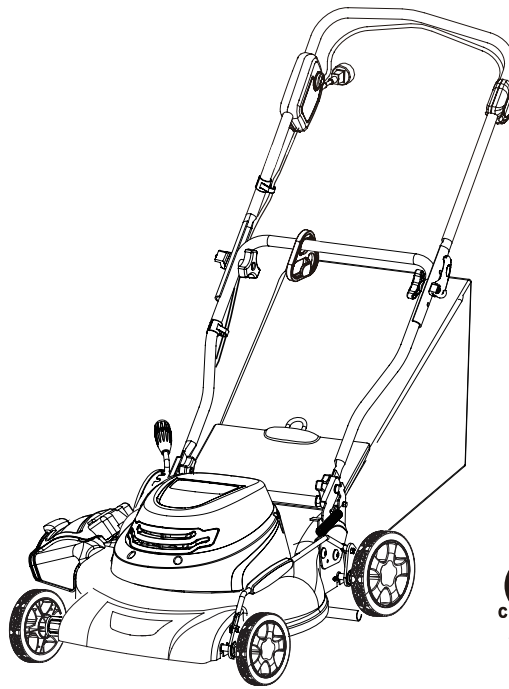
YARDWORKS™

OPERATOR'S MANUAL

20" Electric Lawn Mower

Item No 270-1115



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IMPORTANT:

Read safety rules and instructions carefully before operating equipment.

For parts or service, please call toll free helpline at 1-888-266-7096

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PRODUCT SPECIFICATIONS

20" ELECTRIC LAWN MOWER

Motor	120 V AC, 60 Hz, 12 A
No-load speed	3600 RPM
Cutting path	20" (50.8 cm)
Height adjustments	1 1/4—3 3/8" (3.2 cm-8.6 cm)
Functions	3-in-1: Mulch, side discharge or rear bag
Weight	56 lbs (25.4 kg)

SAFETY INFORMATION

IMPORTANT SAFETY INSTRUCTIONS

⚠ IMPORTANT

READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not handle plug or tool with wet hands.
- Use outdoor extension cords marked W-A, W, SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJTW-A, or SJTOW-A. These cords are rated for outdoor use and reduce the risk of electric shock.
- Never allow children to operate the equipment. This is not a toy. Never allow adults to operate the equipment without proper instruction.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Always wear safety glasses with side shields. Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury. Use face mask if operation is dusty.
- Wear eye protection which is marked to comply with ANSI Z87.1 when operating this product.
- Use extra care when cleaning on stairs.
- Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
- Do not expose to rain; store indoors.
- Use only as described in this manual. Use only identical manufacturer's replacement parts and accessories. Use of any other parts may create a hazard or cause product damage.
- Secure long hair so it is above shoulder level to prevent entanglement in any moving parts.
- Wear heavy long pants, boots, and gloves. Avoid loose garments or jewelry that could get caught in moving parts of the machine or its motor.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance.
- Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces.
- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

SAFETY INFORMATION

- Turn off all controls before unplugging.
- Avoid accidental starting. Be sure the power switch is not on before plugging in. Turn off power switch before unplugging.
- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- Do not leave the tool when plugged in. Unplug from the power outlet when not in use, before servicing, and before storing the tool. Such preventative safety measures reduce the risk of starting the tool accidentally.
- Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Do not operate in poor lighting.
- Keep all parts of your body away from any moving parts and all hot surfaces of the unit.
- Do not put any object into openings. Do not use with any opening blocked; keep openings free of dust, lint, hair, and anything that may reduce air flow.
- Check the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the machine.
- Do not pull or carry by cord, use cord as a handle, close a door on a cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Do not handle plug or appliance with wet hands.
- In a double insulated appliance, two systems of insulation are provided instead of grounding. No grounding means is provided on a double insulated appliance, nor should a means for grounding be added to the appliance. Servicing a double insulated appliance requires extreme care and knowledge of the system and should be done only by qualified service personnel. Replacement parts for a double insulated appliance must be identical to the parts they replace.
- Not intended for commercial use.

SPECIFIC SAFETY RULES FOR MOWER

⚠ W A R N I N G

This symbol points out important safety instructions, which if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury.

SAFETY INFORMATION

⚠ D A N G E R

This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

⚠ W A R N I N G

When using electric lawn mowers, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

GENERAL OPERATION

Use of this mower should be restricted to individuals who have read and understoood and will follow the warningsand instructions that are printed in this manual and on the mower.

- Carefully read all instructions on the mower and in the manual before attempting to assemble and operate the mower. Keep this manual in a safe place for future reference, and consult it regularly.
- Become familiar with all controls and their proper operation. Know how to stop the mower and how to disengage the power in an emergency.
- In order to avoid contact with the blade or injury caused by a thrown object, stay in the operating zone behind the handles, and keep children and bystanders at least 50 ft.(15 m) away from the mower while it is in operation. Stop the motor immediately if someone enters the mowing area.
- Thoroughly inspect the area where the mower is to be used. Remove all stones, sticks, wire, toys, and other objects that could be tripped over or thrown by the blade. Thrown objects can cause serious personal injury.
- Plan your mowing pattern in such a way as to avoid discharging material toward roads, sidewalks, bystanders, etc. Do not discharge material against a wall or obstruction. Doing so may cause the discharged material to ricochet back toward the operator.
- Always wear proper eye protection in order to protect your eyes while operating or performing any adjustment or repair. Thrown objects that ricochet can cause serious eye injury.
- Always wear a face mask or a dust mask when operating the mower in a dusty environment.
- Dress properly. Do not wear loose clothing or jewelry that can get caught in moving parts. The wearing of protective gloves and safety footwear is recommended.
- Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the lawn mower. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
- Many injuries occur as a result of the mower being pulled over the operator's foot during a fall caused by slipping or tripping. Do not operate this mower in bare feet, or while wearing sandals or lightweight (e.g.:canvas) shoes. Do not hold onto the mower if you are falling. Release the handle immediately.

SAFETY INFORMATION

- Never pull the mower back toward you while you are walking. If you must back the mower away from a wall or an obstruction, first look down and behind in order to avoid tripping, and then follow these steps:
    - Step back from the mower in order to fully extend your arms.
    - Be sure that you are well balanced.
    - Pull the mower back slowly.
- Do not use the mower for any job except that for which it is intended. Do not force the mower.
- Do not put hands or feet near rotating parts or under the cutting deck. Contact with the blade can amputate hands and feet.
- Do not attempt to adjust the wheels or the cutting height while the motor is running.
- Avoid dangerous environments. Do not operate the mower in the rain or in wet or damp grass.
- Mow only in daylight or in good artificial light. Do not rush a mowing job.
- Stop the blade when crossing gravel driveways, walkways,or roads.
- If the mower starts to vibrate excessively, stop the motor and check for the cause immediately. Vibrationis generally a warning of trouble.
- Stop the motor and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade will continue to rotate for a few seconds after the motor is shut off. Do not place any part of your body in the blade area until you are sure that the blade has stopped rotating.
- Never operate mower without a proper trail shield, discharge cover, grass catcher, blade/ motor control, or other safety device in place and in working order. Do not operate the mower with damaged safety devices. Doing so can result in injury.
- Stay behind the handle when the engine (motor) is running.
- Stop machine if anyone enters the area.
- Do not pull machine backward unless absolutely necessary. Always look down and behind before and while moving backward.
- Never leave a running machine unattended.
- Operate machine only in daylight or good artificial light.

⚠ WARNING(PROPOSITION 65)

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemical: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAFETY INFORMATION

CHILD SAFETY

Tragic accidents can occur if the operator is not aware of the presence of children.

- Keep children out of the mowing area and under the watchful care of a responsible adult.
- Do not allow children under the age of 14 to operate this mower. Children who are 14 years of age and older must read and understand the operating instructions and safety rules in this manual and must be trained and supervised by a parent.
- Stay alert, and turn the mower off if a child or any other person enters the mowing area.
- Look behind and down for small children before and while moving backwards.
- Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your view of a child who may run into the path of the mower.

SAVE THESE INSTRUCTIONS

SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
∼	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rational speed, at no load
⧈	Class II Construction	Double-insulated construction
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations
	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
	Eye and Head Protection	Wear eye and head protection when operating this equipment.
	Ricochet	Thrown objects can ricochet and result in personal injury or property damage.
	Sharp Blade	Danger – Keep hands and feet away from blade.
	Operating on a slope	Do not mow a slope that has an angle of greater than 15°.
	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

⚠ W A R N I N G

To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline 1-888-266-7096 for assistance.

⚠ W A R N I N G

The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS

ELECTRICAL

DOUBLE INSULATED LAWN MOWER *(See Figure 1.)*

⚠ C A U T I O N

IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A CERTIFIED ELECTRICIAN CHECK THE RECEPTACLE.

⚠ W A R N I N G

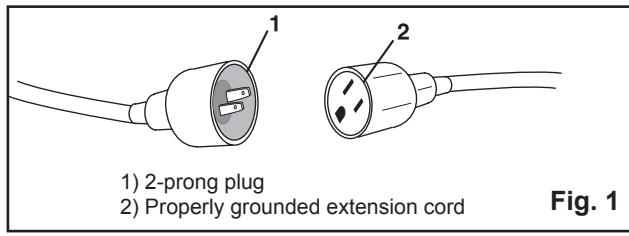
THIS MOWER IS FOR OUTDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

This mower is "DOUBLE INSULATED" ⧈

- Replacement Parts: When servicing use only identical replacement parts.
- Polarized Appliance Connections: To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way.

GUIDELINES FOR USING EXTENSION CORDS

USE THE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.



1) 2-prong plug
2) Properly grounded extension cord

Fig. 1

MINIMUM GAUGE FOR EXTENSION CORDS (AWG)

(WHEN USING 120 V ONLY)

Amp Rating		Total Length of Cord in Feet (meters)			
More Than	Not More Than	25' (7.6 m)	50' (15 m)	100' (30.4 m)	150' (45.7 m)
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Keep your extension cords away from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit should not be less than #12 wire and should be protected with a 15 A time delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

⚠ W A R N I N G

ALTHOUGH THIS TOOL IS DOUBLE INSULATED, THE EXTENSION CORD AND RECEPTACLE MUST STILL BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

SAVE THESE INSTRUCTIONS

KNOW YOUR LAWN MOWER

Read this operator's manual and safety rules before operating your lawn mower. Compare the illustration in Figure 2 to your lawn mower in order to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

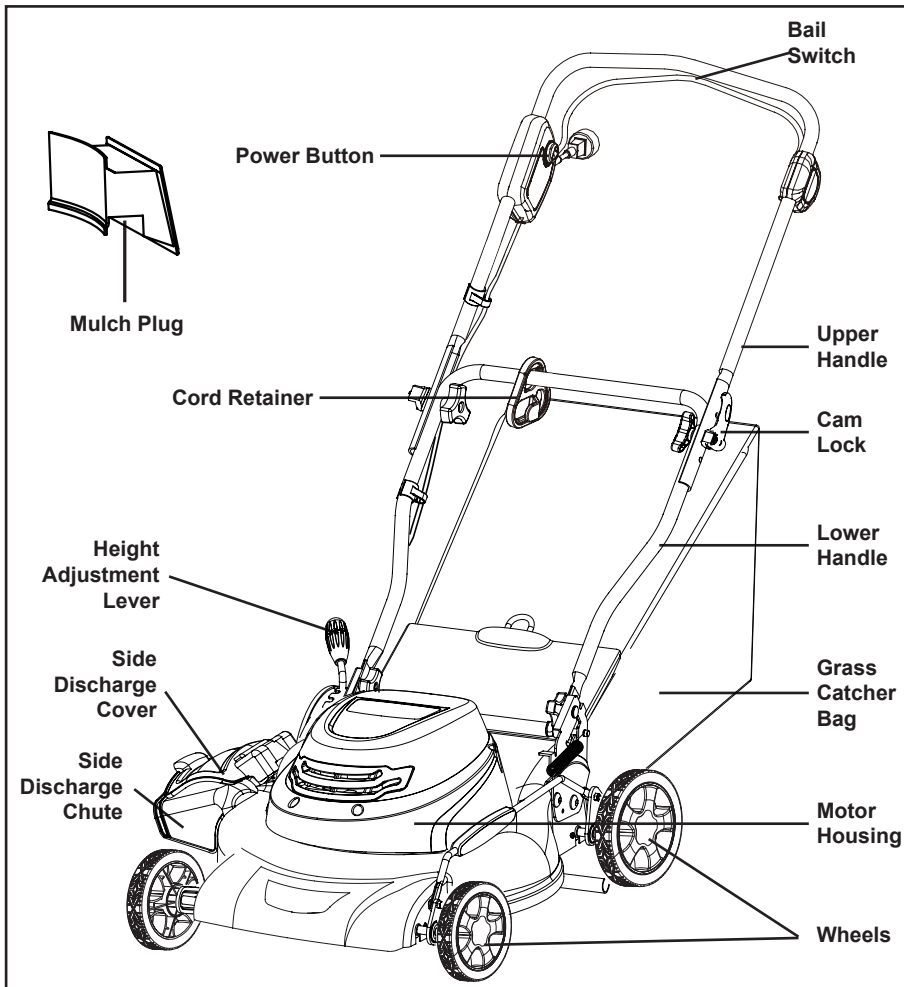


Fig. 2

ASSEMBLY INSTRUCTIONS

UNPACKING

This product has been shipped completely assembled.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-888-266-7096 for assistance.

PACKING LIST

- Lawn mower
- Mulch plug
- Grass catcher bag
- Side discharge chute
- Owner's Manual

⚠ W A R N I N G

If any parts are damaged or missing, do not operate this product until the parts are replaced. Failure to heed this warning could result in serious personal injury.

⚠ W A R N I N G

Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

⚠ W A R N I N G

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse, and could result in a hazardous condition leading to possible serious personal injury.

ASSEMBLY INSTRUCTIONS

⚠ W A R N I N G

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

⚠ W A R N I N G

Always wear safety goggles or safety glasses with side shields when operating power tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

⚠ W A R N I N G

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

ASSEMBLING THE HANDLE *(See Figure 3-4)*

- Remove any packing material which may be between the upper and lower handles for shipping purposes.
- Pull up and back on the upper handle to raise the handle into the operating position. Make certain the lower handle is seated securely into the handle mounting bracket (see Fig. 3).
- Align the holes (3) between the upper handle (1) and lower (2) handles. Insert the cam locks (4) and tighten them with the wing nuts (5) provided.
- Secure the lower handle to the bracket with the knob (6) in each side (see Fig. 4).

Fig. 3

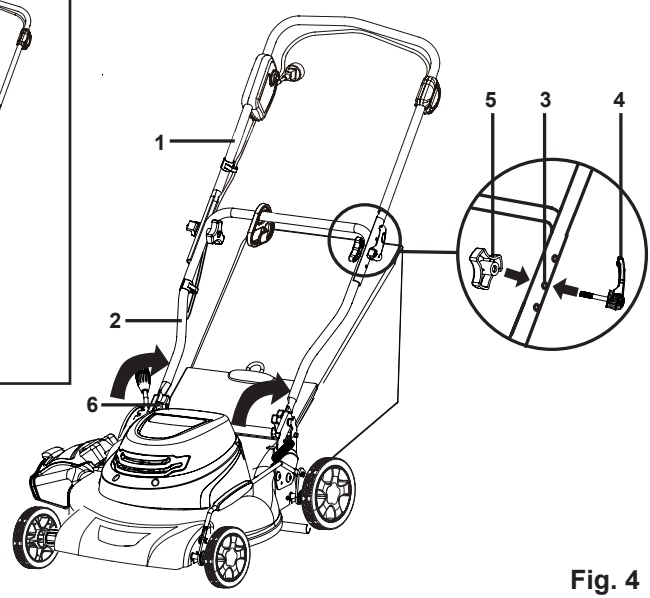


Fig. 4

ASSEMBLY INSTRUCTIONS

USING THE CORD RETAINER *(See Figure 5-7)*

This lawn mower is equipped with a cord retainer in order to prevent the extension cord from disconnecting from the power cord while the mower is in use. The cord retainer hangs from the cord guide bar.

NOTE: Do not plug the extension cord into the outlet until it has been connected to the cord retainer and plugged into the mower.

To use the cord retainer:

- Fold the extension cord in order to forming a tight loop near the retainer.
- Push the loop through the bottom hole in the retainer (See Figure 5).
- Slide the loop over the retaining clip, and pull down until the cord is secured (See Figure 6).

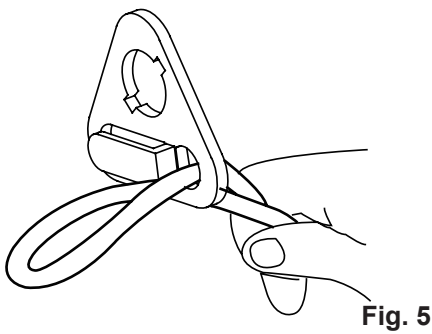


Fig. 5

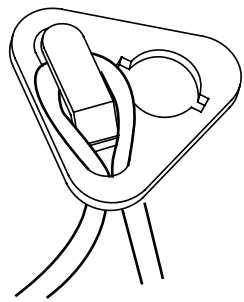


Fig. 6

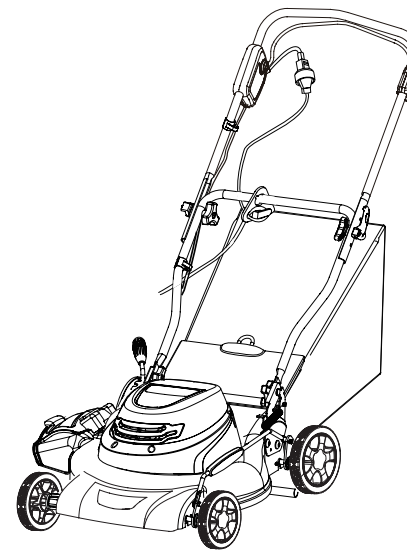


Fig. 7

INSTALLING THE GRASS CATCHER BAG *(See Figure 8)*

- UNPLUG THE POWER CORD, AND WAIT FOR BLADE TO COME TO A COMPLETE STOP.
- Lift the chute cover (1).
- While holding up the cover (1), place the grass catcher bag hanger hooks (2) into the opening on the chute cover (1) to allow the hanger hooks to attach to the rod (3) which secures the chute cover.

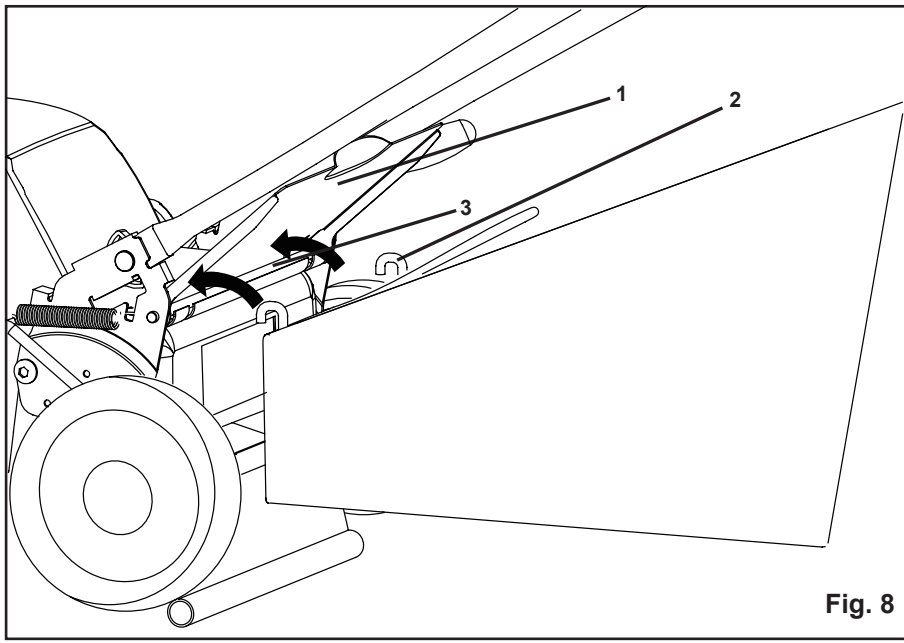


Fig. 8

NOTE: For optimal performance empty grass catcher bag often during use. A full grass bag will inhibit performance of the mower and collection of grass clippings.

INSTALLING THE SIDE DISCHARGE CHUTE *(See Figure 9)*

This mower has 3 different functions-mulch, side discharge, and rear bag. If you wish to discharge the clippings rather than mulch, perform these steps.

- UNPLUG THE POWER CORD, AND WAIT FOR BLADE TO COME TO A COMPLETE STOP.
- Lift the side discharge cover (1).
- Align the slot on the discharge chute (2) with the pins on the underside of the discharge cover (1).
- Lower the discharge chute (2) until the hooks on the mower deck are secured in the openings in the discharge chute (2).
- Release the side discharge cover (1).

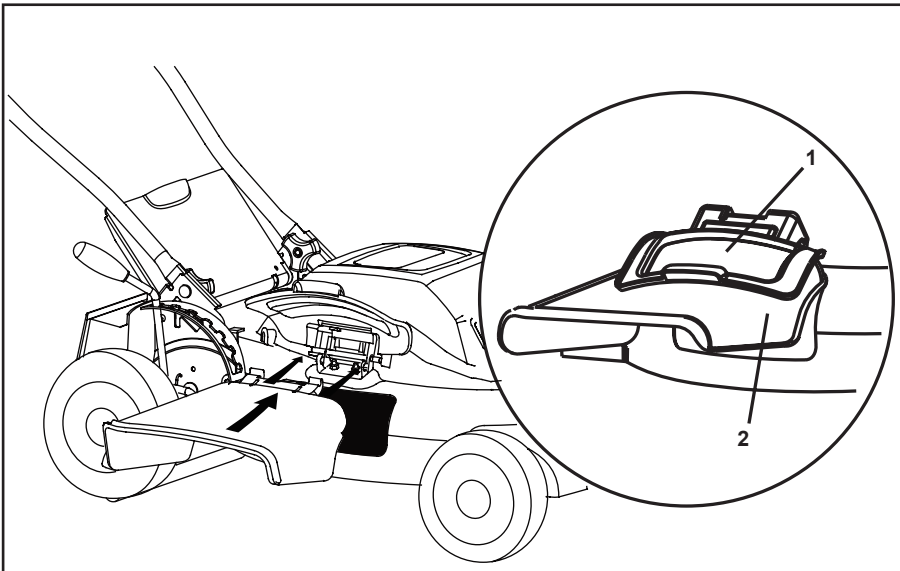


Fig. 9

INSTALLATION OR REMOVAL OF THE MULCH PLUG *(See Figure 10)*

• UNPLUG THE POWER CORD, AND WAIT FOR BLADE TO COME TO A COMPLETE STOP.

• To remove the mulch plug, lift the chute cover (1) and pull out on the handle.

• The mulch plug (2) is inserted on an angle, so it will require some force when removing.

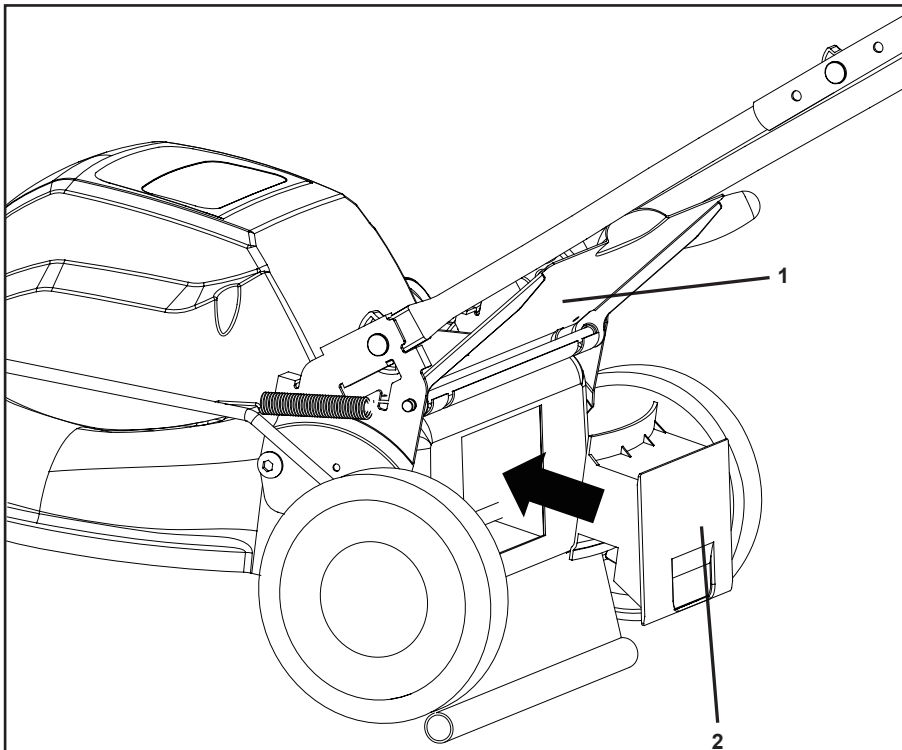


Fig. 10

OPERATING YOUR LAWN MOWER

STARTING AND STOPPING THE MOWER *(See Figure 11-12)*

Starting the mower:

- Hold the power button (1) and pull the bail switch (2) upward to the handlebar to start the mower.

Stopping the mower:

- To stop the mower, release the bail switch (2).

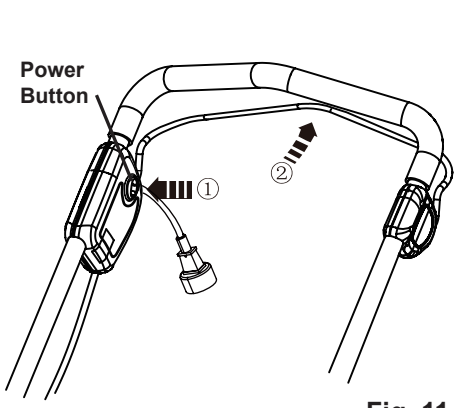


Fig. 11

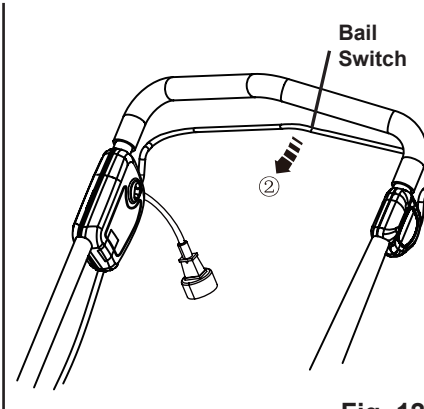


Fig. 12

⚠ W A R N I N G

The operation of any mower can result in foreign objects being thrown into the eyes, which can cause severe eye damage. Always wear safety glasses while operating the mower and while performing any adjustments or repairs.

⚠ W A R N I N G

Ensure that other people and pets remain at least 50 ft. (15 m) away when the mower is in use.

INSPECT THE CUTTING AREA

Remove all stones, sticks, wire, and other debris that might be thrown by the rotating blades.

ADJUSTING THE CUTTING HEIGHT *(See Figure 13)*

- Simply depress the lever (1) towards the wheel and move to desired position. This sets all wheels to the same position.
- To raise the height, pull the height adjustment lever from the current stop position towards the back of the mower.
- To lower the height, pull the height adjustment lever from the current stop position towards the front of the mower.

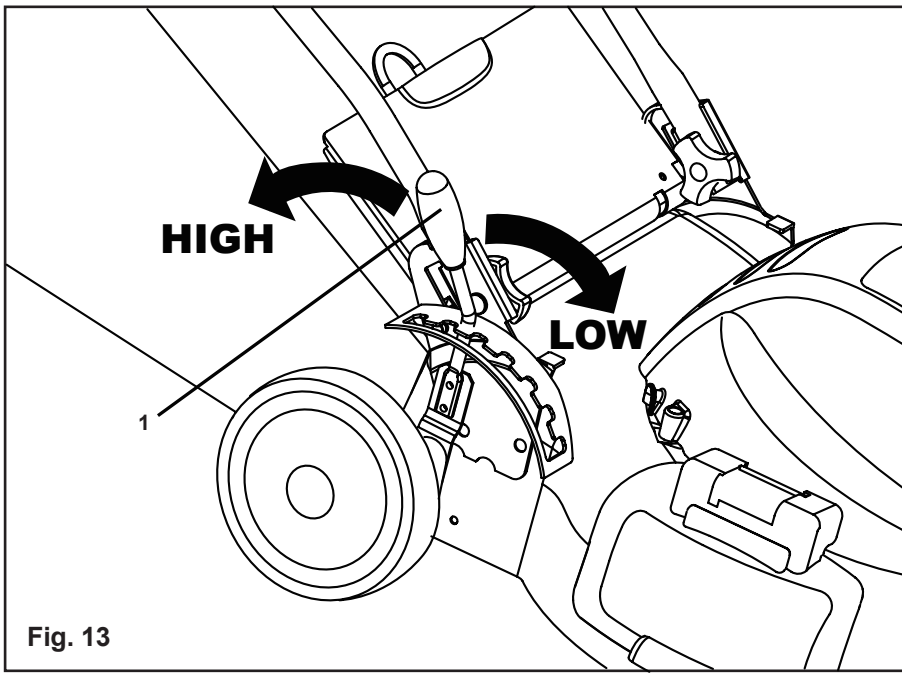


Fig. 13

ADJUSTING THE UPPER HANDLE HEIGHT *(See Figure 14)*

• Loosen the upper handle knob.

• Adjust the upper handle to the most comfortable of the 3 positions.

• Snug the upper handle knob and lock the cam lock handle to secure.

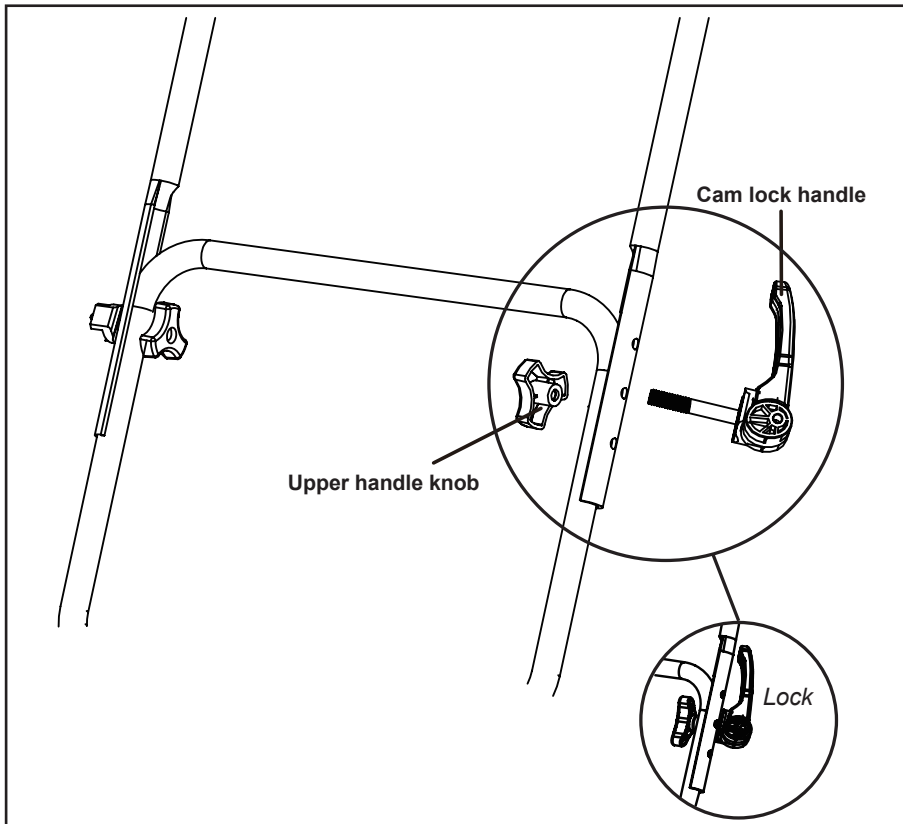


Fig. 14

SLOPE OPERATION

⚠ W A R N I N G

Do not mow a slope that has an angle of greater than 15° (a rise of approximately 2-1/2 ft. [75m] every 10 ft. [3m]). Mow across the face of a slope, and never up and down.

- Slopes are a major factor related to slip and fall accidents that can result in severe injury. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not mow it. For your safety, do not attempt to mow slopes greater than 15 degrees.
- Mow across the face of slopes, not up and down. Exercise extreme caution when changing direction on slopes.
- Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles. Remove all objects such as rocks, tree limbs, etc., which could be tripped over or thrown by the blade.
- Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance, release the switch control lever immediately.
- Do not mow near drop-offs, ditches, or embankments; you could lose your footing or balance.

OPERATING YOUR LAWN MOWER

MOWING TIPS

NOTE: A sharp blade will greatly enhance the performance of the mower, especially when cutting high grass. Be sure to check the blade and to sharpen it at least once per year, as described in the Maintenance section.

- Verify that the lawn is free of stones, sticks, wires, and other objects that could damage the blades or the motor. These objects could be accidentally thrown by the mower in any direction, and could cause serious personal injury to the operator and to others.
- In order to prevent electric shock, do not operate the mower in damp or wet conditions.
- Do not mow in circles. Travel back and forth across the lawn.
- When cutting thick grass, reduce walking speed in order to allow for a more effective cut and a proper discharge of the clippings. For a healthy lawn, always cut off one-third or less of the total length of the grass. The average lawn should be approximately 1-1/2 to 2" (3.8 to 5 cm) long during cool months, and more than 2" (5 cm) long during hot months. If there is growth, the lawn should be cut in the fall.

MULCHING TIPS

NOTE: ALWAYS INSPECT AREA WHERE MOWER IS TO BE USED AND REMOVE ALL STONES, STICKS, WIRE, BONES AND OTHER DEBRIS WHICH MIGHT BE THROWN THE ROTATING BLADE.

- Release switch to turn mower OFF when crossing any graveled area (stones can be thrown by the blade).
- Set mower at highest cutting height when mowing on rough ground or in tall weeds.
- For effective mulching, do not cut wet grass, as it tends to stick to the underside of the deck preventing proper mulching of grass clippings. New or thick grass may require a narrower cut. The ground speed should be adjusted to the condition of the lawn. If mowing has been delayed and the grass has been allowed to grow in excess of 4", mow twice to reduce the grass height to 3-3/4" maximum.
- Walk at a good, steady pace. Overlap your rows. Don't let the grass get too tall. If the grass gets too long start at the highest cutting position and work down to the desired cutting height.

⚠ W A R N I N G

If you strike a foreign object, stop the motor and disconnect the power cord. Thoroughly inspect the mower for any damage. Repair any damage before operating the mower. Excessive vibration of the mower during operation is an indication of damage. Thoroughly inspect the mower and repair any damage before operating the mower.

CUTTING BLADE REPLACEMENT *(See Figure 15-16)*

⚠ W A R N I N G

Always protect your hands by wearing heavy gloves and/or wrapping the cutting edges with rags or other materials when performing any maintenance on the blades.

- RELEASE THE BAIL SWITCH TO TURN THE MOWER OFF, WAIT FOR THE BLADE TO COME TO A COMPLETE STOP, AND THEN UNPLUG THE POWER CORD.
- While wearing leather padded gloves, wedge a block of wood between the blade and the mower deck in order to prevent the blade from turning when the nut is being removed.
- Using a 15-mm wrench or socket, loosen the blade nut (1) and remove the blade (4). Turn the nut "COUNTERCLOCKWISE" to loosen it and "CLOCKWISE" to tighten it.
- Remove the blade nut (1), the square washer (2), the insulator washer (3), and the blade (4).
- To re-install the blade, position the blade with the cutting edges toward the ground. Assemble the blade nut, the square washer, and the insulator washer as shown in following. Using a 15-mm wrench or socket, turn the blade nut "CLOCKWISE" to secure the blade.

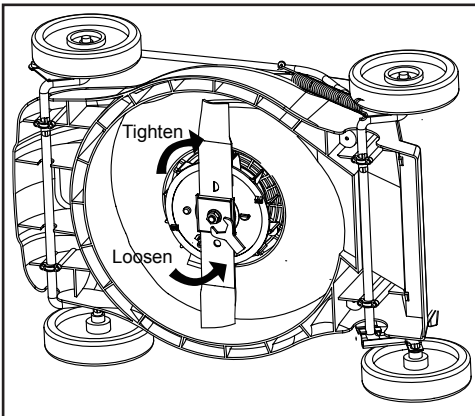


Fig. 15

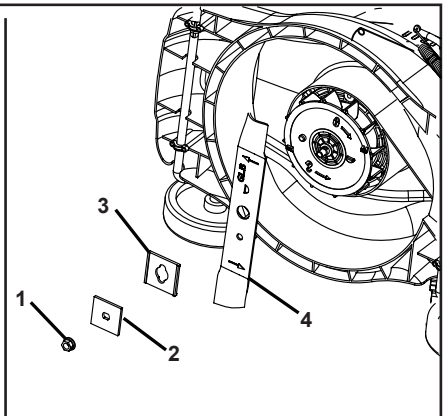


Fig. 16

NOTE: Be sure to replace the parts in the exact order in which they were removed. When installing the cutting blade, verify that it is installed with the curved ends pointing toward the mower deck, and not toward the ground. Refer to the schematic drawing on page 29 of this Manual.

MAINTENANCE

CLEAN THE MOWER

⚠ W A R N I N G

To reduce the risk of electric shock, do not expose the mower to water.

The underside of mower deck should be cleaned after each use as grass clippings, leaves, dirt and other debris will accumulate causing rust and corrosion.

- Remove any buildup of grass and leaves on or around the motor cover (do not use water). Wipe the mower clean with a dry cloth occasionally.
- If debris build up on the underside of the unit while in use, stop the motor and disconnect it from the power supply. Tilt the mower forward, or on its side, and scrape it clean with an appropriate tool.

STORAGE

To reduce the risk of electric shock, do not expose the mower to water.

- Make certain the power cord is disconnected.
- Clean mower as instructed in previous section.
- Inspect and replace/sharpen blade, if required. Refer to the Maintenance section.
- Store mower in a dry, clean area. Do not store next to corrosive materials, such as fertilizer and rock salt.
- Wipe extension cord to remove any foreign substances such as oil or stains. Replace extension cord if cut or damaged in any way.
- Wind cord in a series of equal loops to prevent it from tangling.
- Store mower indoors, in a cool, dry place, out of the reach of children. Do not cover lawn mower with a solid plastic sheet. Plastic coverings trap moisture around the mower causing corrosion.

The handle may be folded away completely for storage. *(See Figure 17)*

- Lift up the cam locks (1) on the sides of the handle to unlock, and fold the upper handle (2) down.
- Loosen the handle knobs (3), pull outwards on each side of the lower handle (4), and lift the sides of the lower handle past the edges of the handle mounting brackets (5). Fold the lower handle forward. Make sure not to bend or kink the power cord.

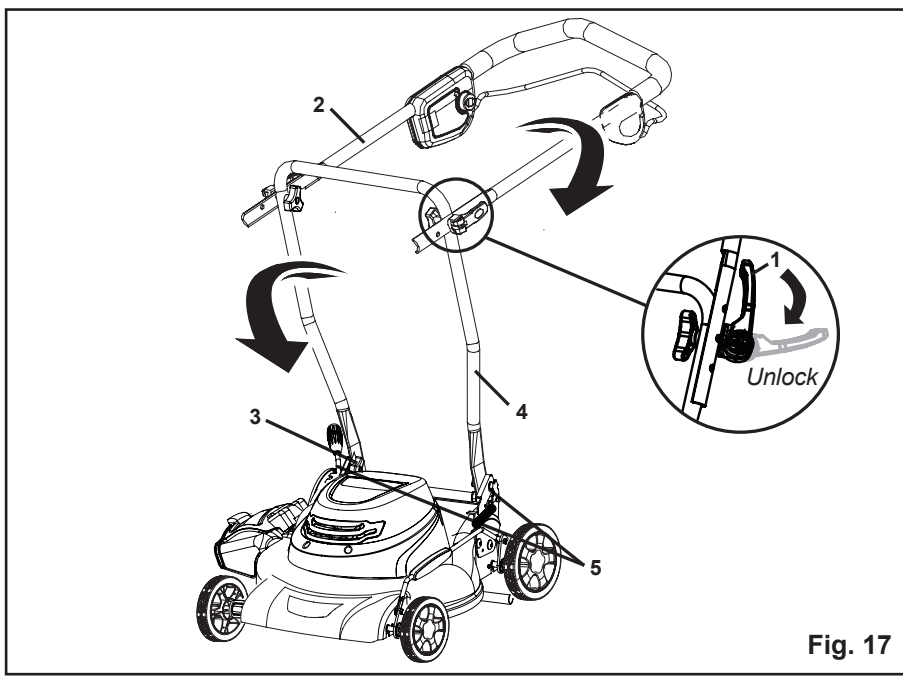


Fig. 17

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Handle not in position.	Carriage bolts not seated properly. Handle knobs not tightened.	Adjust the height of the handle and make sure the carriage bolts are seated properly Tighten handle knobs.
Mower not starting.	Extension cord not connected to the mower plug. Extension cord not connected to power source. Motor control switch defective.	Reconnect the cord and use the cord retainer to keep the cord close to the motor/blade control. Connect the extension cord to a live 120V AC, 60 HZ AC receptacle. Have motor control switch replaced by an authorized service center.
Mower cutting unevenly.	Lawn is rough or uneven or height not set properly.	Move the wheels to a higher position. All wheelsmust be placed in the same cutting height for the mower to cut evenly.
Mower not mulching properly.	Wet grass clipping s sticking to the underside of the deck.	Wait until the grass dries before mowing.
Mower hard to push.	High grass, rear of mower housing and blade dragging in heavy grass, or cutting height too low.	Raise cutting height.
Mower vibrating at higher speed.	Blade is unbalanced. Bent motor shaft.	Balance the blade by grinding each cutting edge equally. Stop the motor, disconne ct the power source, and inspect for dam age. Have repaired by an authorized service center before restarting.

LIMITED TW O-YEAR WARRANTY

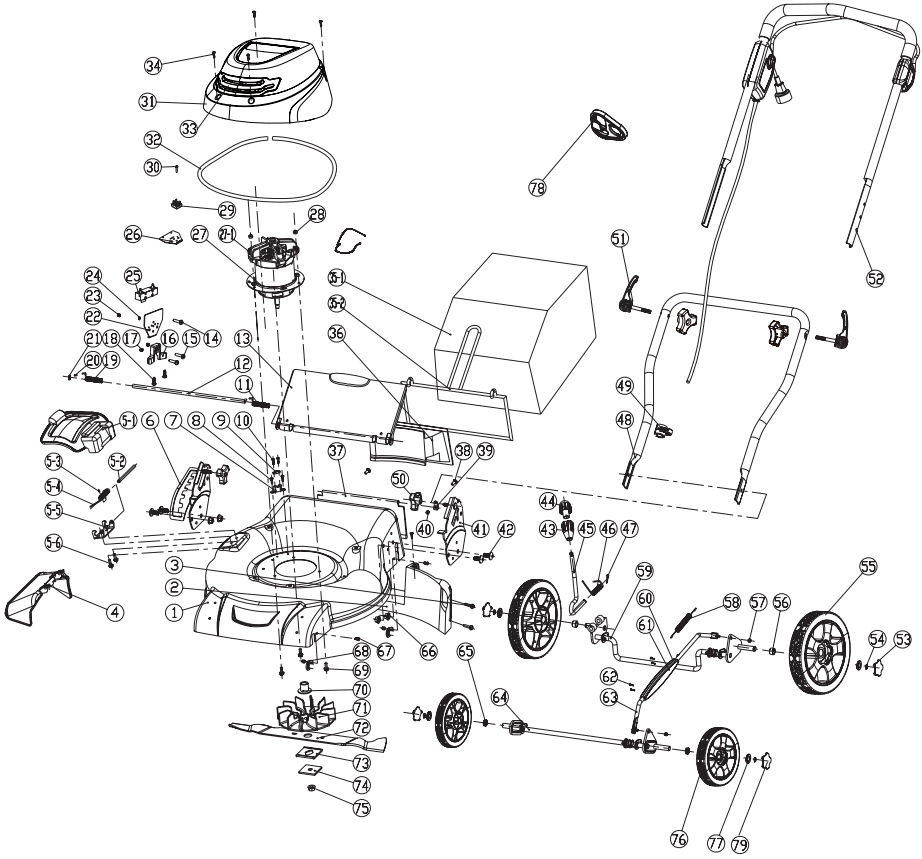
• The manufacturer warrants to the original purchaser that each new product and service part is free from defects in material and workmanship and agrees to repair or replace under this warranty any defective product or part as follows from the original date of purchase.

• 2 —Year Limited Warranty

• THIS WARRANTY IS NOT TRANSFERABLE AND DOES NOT COVER:

- Products sold damaged or incomplete, sold “as is”, sold reconditioned or used as rental equipment.
- Delivery, installation or normal adjustments explained in the owner’s manual.
- Damage or liability caused by shipping, improper handling, improper installation, incorrect voltage or improper wiring, improper maintenance, improper modification, or the use of accessories and /or attachments not specifically recommended.
- Repairs necessary because of operator abuse or negligence, or the failure to install, operate, maintain and store the product according to the instructions in the owner’s manual.
- Damage caused by cold, heat, rain, excessive humidity, corrosive environments and materials, or other contaminants.
- Expendable items that become worn during normal use.
- Cosmetic defects that do not interfere with tool functionality.
- Freight costs from customer to vendor.
- When servicing use only identical replacement parts.
- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT.
- Some states do not allow the exclusion or limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- WARRANTY REPLACEMENT PARTS are available by calling the toll free number, 1-888-266-7096, 8:30am – 5:00 pm EST, Monday-Friday.

EXPLODED VIEW



PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	31301227-5	Deck	1
2	34106236-1	Rear enclosure	1
3	32201235	Screw	6
4	3410438	Side discharge chute	1
5-1	3410338	Side discharge cover	1
5-2	3320338	Side discharge axle	1
5-3	3420207	Rubber bushing	2
5-4	3340237	Spring	1
5-5	3330637	Side discharge bracket	1
5-6	3220136	Bolt	2
6	33305222	Height adjustment plate(R)	1
7	3410137	Cord guide	1
8	3221137	Screw	2
9	3410403	Cord clip	1
10	3220505	Screw	2
11	33304235	Spring for rear cover (L)	1
12	3320138-1	Axle for rear cover	1
13	34103236	Rear cover	1
14	3220511	Screw	1
15	3220850	Screw	2
16	3410290-1	Resistance clamp	1
17	3220439	Nut	2
18	3220951	Screw	2
19	33302235	Spring for rear cover (R)	1
20	3420436	Spring bushing	2
21	3290506	Clip	1
22	3331035	Resistance heat radiator	1
23	3290105	Nut	1
24	3290675	Spring washer	1
25	36901477	Resistor & bracket	1
26	3331035	Rectifier heat radiator	1
27	3610138-1	12 A motor assy.	1
28	32205227	Bolt	1
29	3690135	Rectifier (KBPC2504)	1
30	3220404	Screw	1
31	34103222	Motor cover	1
32	3420235-1	Cover seal	1
33	34105222-5	Motor vent	1
34	3220435	Screw	4

PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
35-1	34902237-3	Grass catcher	1
35-2	33301237	Grass catcher bracket	1
36	34104236	Rear plug	1
37	34127229	Rear shield	1
38	3220511	Screw	2
39	33305227-1	New cord clamp	2
40	3221237	Nut	2
41	33302222	Height adjustment plate (L)	1
42	3221637	Bolt	4
43	34114227-4	Height adjustment handle (lower)	1
44	34113227-4	Height adjustment handle (upper)	1
45	31103222	Height adjustment bar	1
46	33401222	Spring	1
47	3290135	Cir-clip	1
48	3330394-2	Lower handle	1
49	3411135	Cord hook	2
50	3410835-4	Handle knob	2
51	31102467	Cam lock assy.	2
52	31101485	Upper handle and switch assy.	1
53	34202227A	10" Wheel cover	2
54	3290440	Clip Φ12	4
55	34202227-8	Wheel (10 X 1.5)	2
56	3320639	Wheel bushing	2
57	3220537	Nut	2
58	3340137-2	Spring	1
59	31102222	Rear wheel axle	1
60	34112227	Link bar decoration (R)	1
61	34111227	Link bar decoration (L)	1
62	32204227	Screw	4
63	33303227	Link bar	1
64	31101222	Front wheel axle	1
65	3320237	Wheel bushing	2
66	3220737	Nut M10	4
67	3220575	Screw	4
68	3220439	Nut M5	4
69	32205227	Bolt M6 X 18	3
70	3320238	Motor bushing	1
71	3410237	Fan	1
72	33313250	20'' blade	1

PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
73	3410535	Blade baffle	1
74	3331435	Square baffle	1
75	3221037	Nut	1
76	34203229A	Wheel (7 X 1.5)	2
77	3331638	Washer	4
78	34120227	Cord retainer	1
79	34203229B	7" Wheel cover	2